FUJITSU

Fujitsu LifeBook

P Series

BIOS Guide

LifeBook P Series Model:

P-1032

P-1035

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FUJITSU PC CORPORATION

P Series BIOS
BIOS SETUP UTILITY

The BIOS Setup Utility is a program that sets up the operating environment for your notebook. Your BIOS is set at the factory for normal operating conditions, therefore there is no need to set or change the BIOS environment to operate your notebook.

The BIOS Setup Utility configures:

• Device control feature parameters, such as changing I/O addresses and boot devices.
• System Data Security feature parameters, such as passwords.

Entering the BIOS Setup Utility

To enter the BIOS Setup Utility do the following:

1. Turn on or restart your notebook.
2. Press the [**F2**] key once the Fujitsu logo appears on the screen. This will open the main menu of the BIOS Setup Utility with the current settings displayed.
3. Press the [RIGHT ARROW] or [LEFT ARROW] key to scroll through the other setup menus to review or alter the current settings.

Navigating Through The Setup Utility

The BIOS setup utility consists of seven menus; Main, Advanced, Security, Power, Boot, Info and Exit. This document explains each menu, including all submenus and setup items.

The following procedures allow you to navigate the setup utility menus:

1. To select a menu, use the cursor keys: [←] [→] .
2. To select a field within a menu or a submenu, use the cursor keys: [↑], [↓].

POINTS

• Selecting a field causes a help message about that field to be displayed on the right-hand side of the screen.

• Pressing the Enter key with the highlight on a selection that is not a submenu or auto selection will cause a list of all options for that item to be displayed. Pressing the Enter key again will select the highlighted choice.

3. To select the different values for each field, press the [**Spacebar**] or [**+**] to change to the next higher selection and [**F5**] or [-] to go to the next lower selection.
4. To activate a submenu press [**Enter**].
5. To return to a menu from a submenu, press [**Esc**].
6. To go to Exit menu from another menu, press [**Esc**].
7. Pressing the [**F9**] key resets all items in the BIOS to the default values.
8. Pressing the [**F10**] key saves the current configuration and exits the BIOS Setup Utility. You will be asked to verify this selection before it is executed.
9. Pressing the [**F1**] key gives you a general help screen.

Entering the Setup Utility After a Configuration Change or System Failure

If there has been a change in system configuration that does not match the parameter settings stored in your BIOS memory, or there is a failure in the system, the system beeps and/or displays an error message after the Power On Self Test (POST). If the failure is not severe, it will give you the opportunity to modify the settings of the setup utility, as described in the following steps:

1. When you turn on or restart the computer there is a beep and/or the following message appears on the screen:

   ```
   Error message - please run SETUP
   program Press <F1> key to continue,
   <F2> to run SETUP
   ```

2. If an error message is displayed on the screen, and you want to continue with the boot process and start the operating system anyway, press the [**F1**] key.

POINTS

If your settings require it, you may be asked for a password before the operating system will be loaded.

3. If an error message is displayed on the screen, and you want to enter the setup utility, press the [**F2**] key.
4. When the setup utility starts with a fault present, the system displays the following message:

   ```
   Warning!
   Error message
   [Continue]
   ```

5. Press any key to enter the setup utility. The system will then display the Main Menu with current parameters values.

MAIN MENU – SETTING STANDARD SYSTEM PARAMETERS

The Main Menu allows you to set or view the current system parameters. Follow the instructions for Navigating Through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Main menu and its submenus, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.

✎ POINT

System Time and System Date can also be set from your operating system without using the setup utility. Use the calendar and time icon on your Windows Control Panel. When you change these settings from your desktop, the BIOS is automatically updated with the same changes.

```
              PhoenixBIOS Setup Utility
┌─────────────────────────────────────────────────────────────┐
│  Main    Advanced   Security   Power   Boot   Info   Exit    │
├─────────────────────────────────────────┬───────────────────┤
│                                          │ Item Specific Help│
│   System Time:        [14:57:01]         │                   │
│   System Date:        [01/26/2002]       │                   │
│                                          │ Adjust calendar   │
│ ▶ Primary Master      [TOSHIBA MK2018GAP-(PM)]  clock.       │
│                                          │                   │
│   Language:           [English (US)]     │ <Tab>, <Shift-Tab>,│
│                                          │ or <Enter> selects │
│                                          │ field.            │
│                                          │                   │
│                                          │                   │
│                                          │                   │
│                                          │                   │
│                                          │                   │
│                                          │                   │
├─────────────────────────────────────────┴───────────────────┤
│ F1  Help     ↑↓ Select Item   -/Space Change Values   F9 Setup Defaults │
│ ESC Exit     ←→ Select Menu    Enter Select ▶ Sub-Menu  F10 Save and Exit │
└─────────────────────────────────────────────────────────────┘
```

Figure 1. Main Menu

Menu Field	Options	Default	Description
System Time:	——	——	Sets and displays the current time. Time is in a 24 hour format of hours:minutes:seconds with 2 digits for each. (HH:MM:SS). Example: 16:45:57. You may change each segment of the time separately. Move between the segments with the [**Tab**] key and/or [**Shift**] + [**Tab**] keys.
System Date:	——	——	Sets and displays the current date. Date is in a month/day/year numeric format with 2 digits each for month and day and 4 digits for year. (MM/DD/YYYY) for example: 03/20/1998. You may change each segment of the date separately. Move between the segments with the [**Tab**] key and/or [**Shift**] + [**Tab**] keys.
Primary Master:	Selects Primary Master submenu	——	Displays the type of device on this ATA/ATAPI interface, if there is one. Pressing the Enter key selects the Primary Master submenu allowing additional device configuration options for this interface.
Language:	• English (US) • Japanese (JP)	[English (US)]	The default setting differs between the US/European and the Japanese model. Selects the display language for the BIOS.

Primary Master Submenu of the Main Menu

The Primary Master submenu identifies which ATA devices are installed.

Note: Actual hard drive label shown may vary. Depending on the drive type, information such as cylinders, heads and sectors may also be displayed.

```
                  PhoenixBIOS Setup Utility
      Main

          Primary Master [FUJITSU MHM2200AT-(PM)]        Item Specific Help

      Type:                     [Auto]               Select ATA/ATAPI drive
      Cylinders:                [16383]              installed here.
      Heads:                    [16]
      Sectors:                  [63]
      Maximum Capacity:         8455MB               [Auto]
                                                     The BIOS auto-types the
                                                     drive on boot time.
      Multi-Sector Transfers:   [16 Sectors]
      LBA Mode Control:         [Enabled]            Except [Auto]
      PIO Transfer Mode:        [FAST PIO 4]         You enter parameters of
      DMA Transfer Mode:        [Ultra DMA 4]        the drive.

                                                     [None]
                                                     The drive is disabled.


      F1  Help      ↑↓ Select Item   -/Space Change Values    F9   Setup Defaults
      ESC Exit      ←→ Select Menu    Enter  Select ▶ Sub-Menu  F10  Save and Exit
```

Figure 2. Primary Master Submenu

Table 2: Fields, Options and Defaults for the Primary Master Submenu of the Main Menu

Menu Field	Options	Default	Description
Type:	• Auto • None • CD-ROM • Hard Disk	[Auto]	(Note: There is no drop-down menu available for the Type field. To change the options, use the plus "+" and minus "-" keys.) Selects the ATA/ATAPI device type. Select Auto to have the type automatically identified by the BIOS at POST. If None is selected, all of the following Set-up items do not appear. If Hard Disk is selected, you must specify the number of Cylinders, Heads, and Sectors for the drive. The CD-ROM option is not currently used; it is reserved for future use.
Cylinders:	• A number between 0 and 65,535	——	This item appears only when the type is identifed as Hard Disk. When Hard Disk is selected, you can change the value. This field is changed by incrementing (pressing the [Spacebar]) or by typing in the number.
Heads:	• A number between 1 and 16	——	This item appears only when the type is identifed as Auto or Hard Disk. When Hard Disk is selected, you can change the value. This field is changed by incrementing (pressing the [Spacebar]) or by typing in the number.

Table 2: Fields, Options and Defaults for the Primary Master Submenu of the Main Menu

Menu Field	Options	Default	Description
Sectors:	• A number between 0 and 63	——	This item appears only when the type is identifd as Auto or Hard Disk. When Hard Disk is selected, you can change the value. This field is changed by incrementing (pressing the [Spacebar]) or by typing in the number.
Maximum Capacity:	• Display only	——	Displays the maximum capacity of the drive calculated from the parameters of the hard disk when Hard Disk is selected.
Multi-Sector Transfers:	• Disabled • 2 Sectors • 4 Sectors • 8 Sectors • 16 Sectors • 32 Sectors • 64 Sectors • 128 Sectors	[16 Sectors]	This option cannot be changed when Auto is selected. Specify the number of sectors per block for multiple sector transfer.
LBA Mode Control:	• Disabled • Enabled	[Enabled]	Enables or disables logical Block Addressing in place of Cylinder, Head, Sector addressing. This option cannot be changed when Auto is selected.
PIO Transfer Mode:	• Standard • Fast PIO 1 • Fast PIO 2 • Fast PIO 3 • Fast PIO 4	[Fast PI0 4]	Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode. This option cannot be changed when Auto is selected. Multi-word DMA is automatically set to mode 1 for Fast PIO 1, Fast PIO 2, Fast PIO 3, and set to mode 2 for Fast PIO 4 / DMA.
DMA Transfer Mode:	• Disabled • Multiword DMA 1 • Multiword DMA 2 • Ultra DMA 0 • Ultra DMA 1 • Ultra DMA 2 • Ultra DMA 3 • Ultra DMA 4	[Ultra DMA 4]	Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode. This option cannot be changed when Auto is selected.

ADVANCED MENU – SETTING DEVICE FEATURE CONTROLS

The Advanced Menu allows you to:

• Enable or disable support for Plug & Play operating systems.
• Select between the display panel and an external CRT display.
• Enable or disable compensation for your display.
• Configure PCI devices in your system.
• Configure CPU and USB features.

Follow the instructions for Navigating Through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Advanced Menu and its submenus, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.

```
                    PhoenixBIOS Setup Utility
    Main    Advanced    Security    Power    Boot    Info    Exit
  ┌──────────────────────────────────────────┬─────────────────────┐
  │                                          │   Item Specific Help │
  │    Plug & Play O/S:              [No]     │                     │
  │                                          │                     │
  │  ▶ Keyboard/Mouse Features               │  [No]               │
  │  ▶ Video Features                        │  The BIOS configures │
  │  ▶ Internal Device Configurations        │  also non-boot devices. │
  │  ▶ PCI Configurations                    │  Select if you are using │
  │  ▶ CPU Features                          │  a non-Plug & Play OS or │
  │  ▶ USB Features                          │  a non-ACPI OS.     │
  │                                          │                     │
  │  ▶ Event Logging                         │  [Yes]              │
  │                                          │  The BIOS configures │
  │                                          │  only boot devices. │
  │                                          │                     │
  │                                          │                     │
  │                                          │                     │
  │                                          │                     │
  │                                          │                     │
  ├──────────────────────────────────────────┴─────────────────────┤
  │ F1  Help      ↑↓ Select Item   -/Space Change Values   F9  Setup Defaults │
  │ ESC Exit      ←→ Select Menu   Enter   Select ▶ Sub-Menu  F10 Save and Exit │
  └─────────────────────────────────────────────────────────────────┘
```
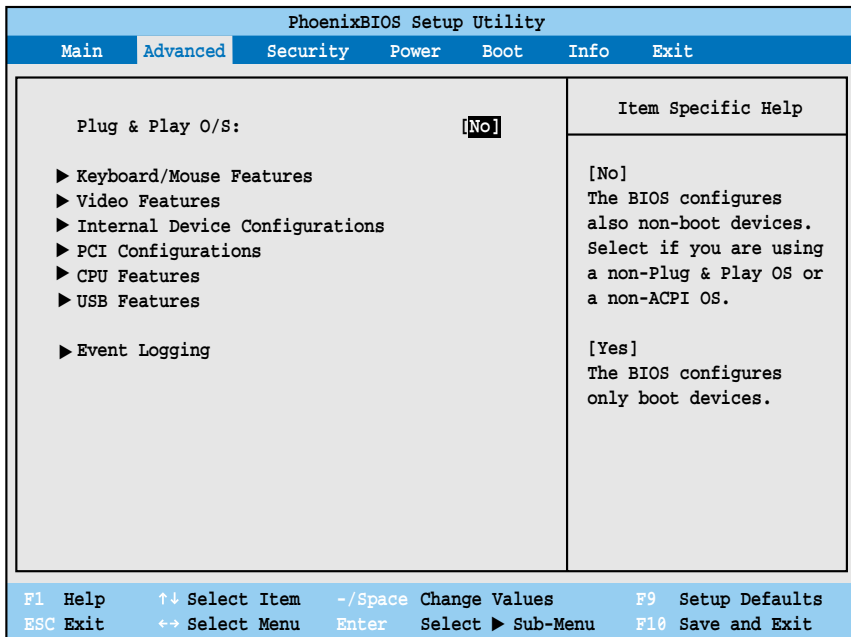
Figure 3. Advanced Menu

Table 3: Fields, Options and Defaults for the Advanced Menu

Menu Field	Options	Default	Description
Plug & Play O/S:	• No • Yes	[No]	Select **Yes** if you are using a Plug & Play capable operating system. Select **No** if you need the BIOS to configure non-boot devices.
Keyboard/Mouse Features	——	——	When selected, opens the Keyboard/Mouse Features submenu, which allows setting external and internal keyboard and mouse parameters.
Video Features	——	——	When selected, opens the Video Features submenu, which allows setting of the display parameters, including routing of video signals to different displays.
Internal Device Configurations	——	——	When selected, opens the Internal Device Configurations submenu, which allows enabling or disabling the Floppy Disk, IDE, and LAN Controllers.
PCI Configurations	——	——	When selected, opens additional menus to configure PCI devices.
CPU Features	——	——	When selected, opens the CPU Features submenu, which allows enabling or disabling of Processor Serial Number feature.
USB Features	——	——	When selected, opens the USB Features submenu, which allows enabling or disabling USB.
Event Logging	——	——	When selected, opens the event logging submenu.

Keyboard/Mouse Features Submenu of the Advanced Menu

The Keyboard/Mouse Features submenu is for setting the
parameters of the integrated and external mouse
and keyboard.

```
                    PhoenixBIOS Setup Utility
          ┌──────────┐
          │ Advanced │
          └──────────┘

             Keyboard/Mouse Features              │    Item Specific Help

                                                  │   Select power-on state
   Numlock:                     [Auto]            │   for Numlock.
   Internal Pointing Device:    [Manual Setting]  │








────────────────────────────────────────────────────────────────────────────
  F1  Help        ↑↓ Select Item    -/Space Change Values    F9   Setup Defaults
  ESC Exit        ←→ Select Menu     Enter Select ▶ Sub-Menu  F10  Save and Exit
```

Figure 4. Keyboard/Mouse Features Submenu

Table 4: Fields, Options and Defaults for the Keyboard/Mouse Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Numlock:	• Auto • On • Off	[Auto]	Sets the NumLock function state when the computer completes booting.
Internal Pointing Device:	• Manual Setting • Always Enabled • Always Disabled	[Manual Setting]	Configures the internal pointing device. When Manual Setting is selected, the internal pointing device can be enabled or disabled by using the [Fn] + [F4] keys. When Always Enabled is selected, the internal device is always selected. When Always Disabled is selected, the internal pointing device cannot be used.

Video Features Submenu of the Advanced Menu

The Video Features Submenu is for setting the display parameters.

```
                     PhoenixBIOS Setup Utility
            Advanced

              Video Features                    Item Specific Help

      Display        [Internal Flat Panel]
      Compensation:  [Enabled]                 Select display terminal.




    F1   Help       ↑↓ Select Item    -/Space Change Values    F9   Setup Defaults
    ESC  Exit       ↔  Select Menu      Enter Select ▶ Sub-Menu  F10  Save and Exit
```

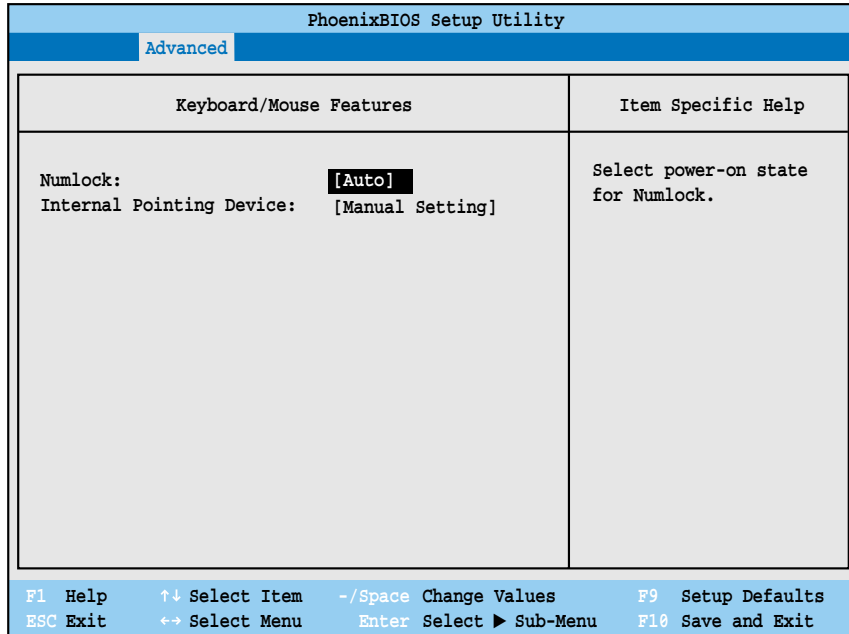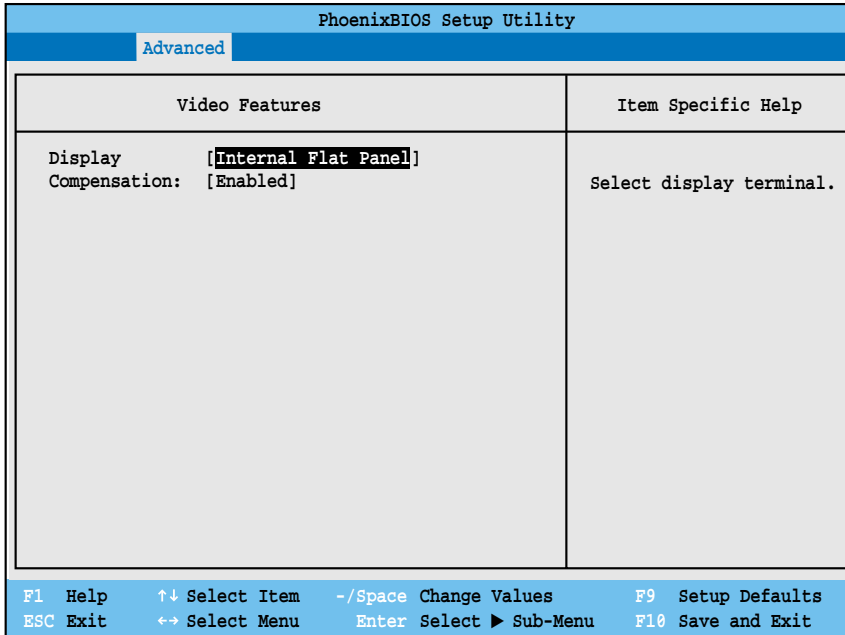**Figure 5. Video Features Submenu**

Table 5: Fields, Options and Defaults for the Video Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Display:	• Internal Flat-Panel • External • Simultaneous	[Internal Flat-Panel]	Selects where the video signal will be routed.
Compensation:	• Disabled • Enabled	[Enabled]	Enables or disables compensation which controls spacing on the display. When enabled, displays with less than pixel resolution 800 x 600 will still cover the entire screen.

Internal Device Configurations Submenu of the Advanced Menu

The Internal Device Configurations submenu allows the
user to configure other internal devices.

```
                    PhoenixBIOS Setup Utility
        ┌──────────┐
        │ Advanced │
        └──────────┘

           Internal Device Configurations          Item Specific Help

        IDE Controller:       [Enabled]          [Disabled]
        Touch Panel:          [Enabled]          IDE port is disabled.

                                                 [Enabled]
                                                 IDE port is enabled.




     F1  Help      ↑↓ Select Item   -/Space Change Values    F9   Setup Defaults
     ESC Exit      ←→ Select Menu      Enter Select ▶ Sub-Menu  F10 Save and Exit
```

Figure 6. Internal Device Configurations Submenu

**Table 6: Fields, Options and Defaults for the Internal Device
Configurations Submenu of the Advanced Menu**

Menu Field	Options	Default	Description
IDE Controller:	• Disabled • Enabled	[Enabled]	Enables or disables selected IDE controller.
Touch Panel:	• Disabled • Enabled	[Enabled]	Enables or disables touch panel.

PCI Configurations Submenu of the Advanced Menu

The PCI Configurations submenu allows the user to
reserve specific interrupts (IRQs) for legacy ISA devices,
and to enable or disable built in PCI device modules.

```
                   PhoenixBIOS Setup Utility
          Advanced

            PCI Configurations                  Item Specific Help

  ▶ IRQ Reservation
                                             Reserve specific IRQs
                                             for use by legacy ISA
                                             devices.




  F1   Help      ↑↓ Select Item   -/Space Change Values   F9   Setup Defaults
  ESC  Exit      ←→ Select Menu     Enter Select ▶ Sub-Menu  F10  Save and Exit
```
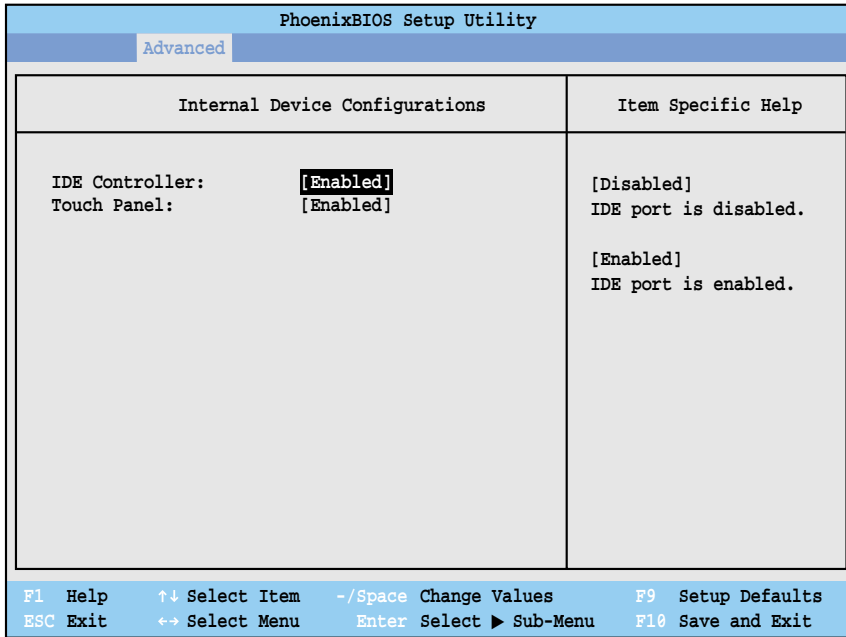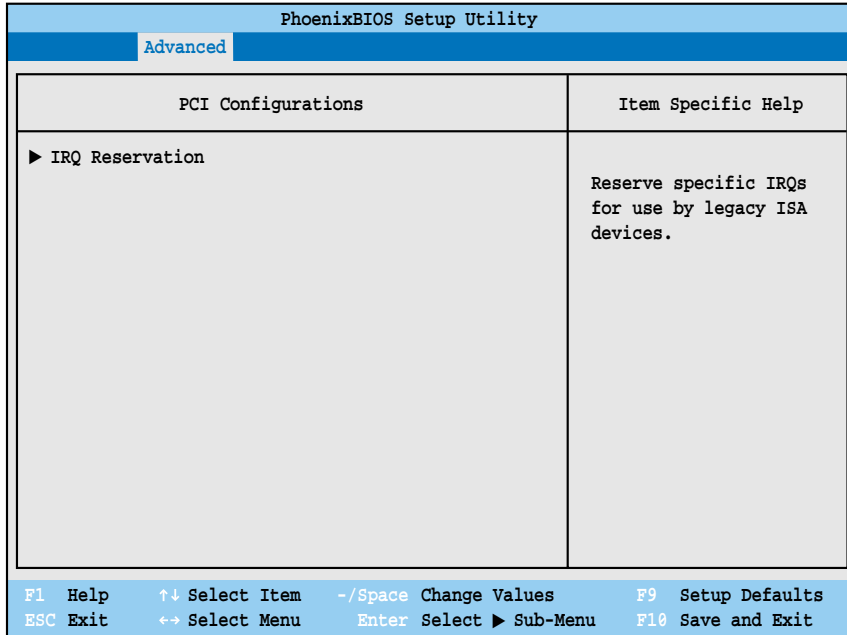
Figure 7. PCI Configurations Submenu

Table 7: Fields, Options and Defaults for the PCI Configurations Submenu of the Advanced Menu

Menu Field	Options	Default	Description
IRQ Reservation	——	——	Reserve specific IRQs for use by legacy ISA devices.

IRQ Reservation Submenu of the PCI Configurations Submenu

The IRQ Reservation submenu of the PCI Configurations submenu allows the user to mark various IRQs as reserved for use by legacy ISA devices. When an IRQ is

reserved, the BIOS does not use it for embedded PCI or ISA devices.

```
                    PhoenixBIOS Setup Utility
            Advanced

             IRQ Reservation                    Item Specific Help

       IRQ 3:     [Available]              Reserve the specified
       IRQ 4:     [Available]              IRQ for use by legacy
       IRQ 5:     [Available]              ISA devices.
       IRQ 7:     [Available]
       IRQ 9:     [Available]
       IRQ 10:    [Available]
       IRQ 11:    [Available]
       IRQ 15:    [Available]

    F1  Help     ↑↓ Select Item   -/Space Change Values    F9  Setup Defaults
    ESC Exit     ←→ Select Menu    Enter Select ▶ Sub-Menu  F10 Save and Exit
```

Figure 8. IRQ Reservation Submenu

Table 8: Fields, Options and Defaults for the IRQ Reservation Submenu of the PCI Configurations Submenu

Menu Field	Options	Default	Description
IRQ 3:	• Available • Reserved	[Available]	Reserves IRQ 3. If Reserved is selected, BIOS reserves IRQ 3 for use by legacy ISA devices and does not use it for embedded PCI/ISA devices. IRQ 3 is removed from the IRQ bitmap in the PCI IRQ routing table.
IRQ 4:	• Available • Reserved	[Available]	Reserves IRQ 4.
IRQ 5:	• Available • Reserved	[Available]	Reserves IRQ 5.
IRQ 7:	• Available • Reserved	[Available]	Reserves IRQ 7.
IRQ 9:	• Available • Reserved	[Available]	Reserves IRQ 9.
IRQ 10:	• Available • Reserved	[Available]	Reserves IRQ 10.
IRQ 11:	• Available • Reserved	[Available]	Reserves IRQ 11.
IRQ 15:	• Available • Reserved	[Available]	Reserves IRQ 15.

CPU Features Submenu of the Advanced Menu

The CPU Features submenu configures certain features
of the CPU in the system.

```
                    PhoenixBIOS Setup Utility
        ┌─────────────┐
        │  Advanced   │
        └─────────────┘

  ┌──────────────────────────────────────┬──────────────────────────┐
  │            CPU Features                │     Item Specific Help    │
  ├──────────────────────────────────────┼──────────────────────────┤
  │                                        │                          │
  │  Processor Serial Number:    [Disabled]│  Configures Processor    │
  │                                        │  Serial Number feature   │
  │                                        │  of Pentium(R) III       │
  │                                        │  processor.              │
  │                                        │                          │
  │                                        │  [Disabled]              │
  │                                        │  Processor Serial Number │
  │                                        │  feature is disabled.    │
  │                                        │                          │
  │                                        │  [Enabled]               │
  │                                        │  Processor Serial Number │
  │                                        │  feature is enabled.     │
  │                                        │                          │
  ├──────────────────────────────────────┴──────────────────────────┤
  │ F1  Help      ↑↓ Select Item   -/Space Change Values    F9  Setup Defaults │
  │ ESC Exit      ←→ Select Menu     Enter Select ▶ Sub-Menu F10 Save and Exit  │
  └───────────────────────────────────────────────────────────────────┘
```
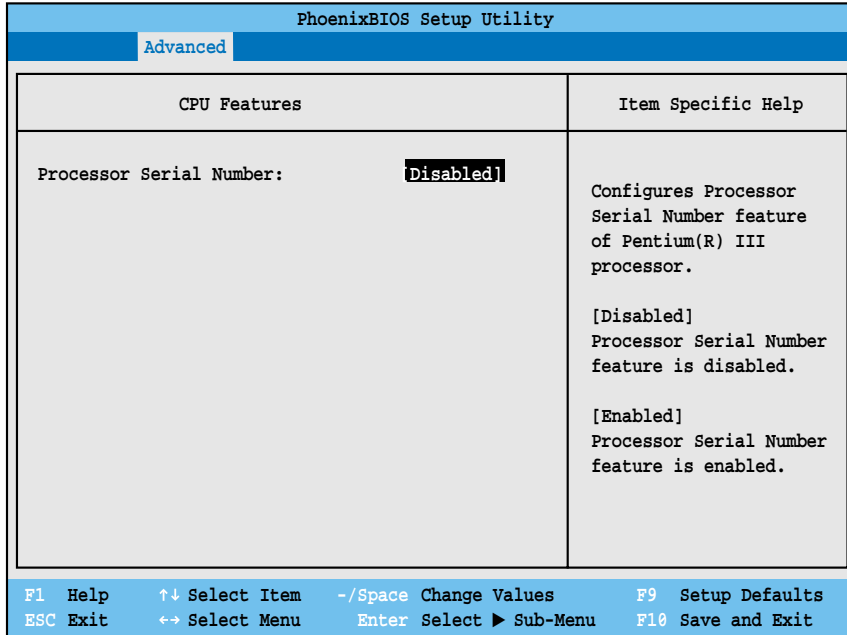
Figure 9. CPU Features Submenu

Table 9: Fields, Options and Defaults for the CPU Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Processor Serial Number:	• Enabled • Disabled	[Disabled]	Enables or disables the Processor Serial Number feature of the processor.

USB Features Submenu of the Advanced Menu

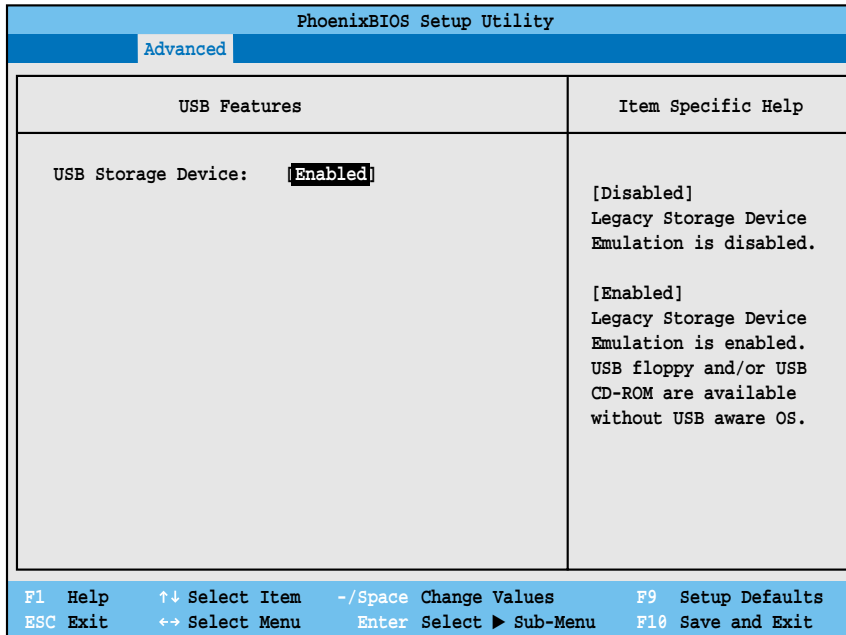The USB Features submenu configures the USB capabilities of the system.

```
                    PhoenixBIOS Setup Utility
          Advanced

                                          ┌──────────────────────
            USB Features                  │   Item Specific Help
                                          │
                                          │
       USB Storage Device:    [Enabled]   │
                                          │  [Disabled]
                                          │  Legacy Storage Device
                                          │  Emulation is disabled.
                                          │
                                          │  [Enabled]
                                          │  Legacy Storage Device
                                          │  Emulation is enabled.
                                          │  USB floppy and/or USB
                                          │  CD-ROM are available
                                          │  without USB aware OS.
                                          │
                                          │
                                          │
                                          │
                                          │
                                          │
   F1  Help      ↑↓ Select Item   -/Space Change Values    F9  Setup Defaults
   ESC Exit      ←→ Select Menu     Enter Select ▶ Sub-Menu  F10 Save and Exit
```

Figure 10. USB Features Submenu

Table 10: Fields, Options and Defaults for the USB Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
USB Storage Device:	• Disabled • Enabled	[Enabled]	When enabled, Legacy Storgae Device Emulation is enabled and USB floppy and/or CD-ROM are available without USB-aware OS.

Event Logging Submenu of the Advanced Menu

The Event Logging submenu is for setting up the logs for
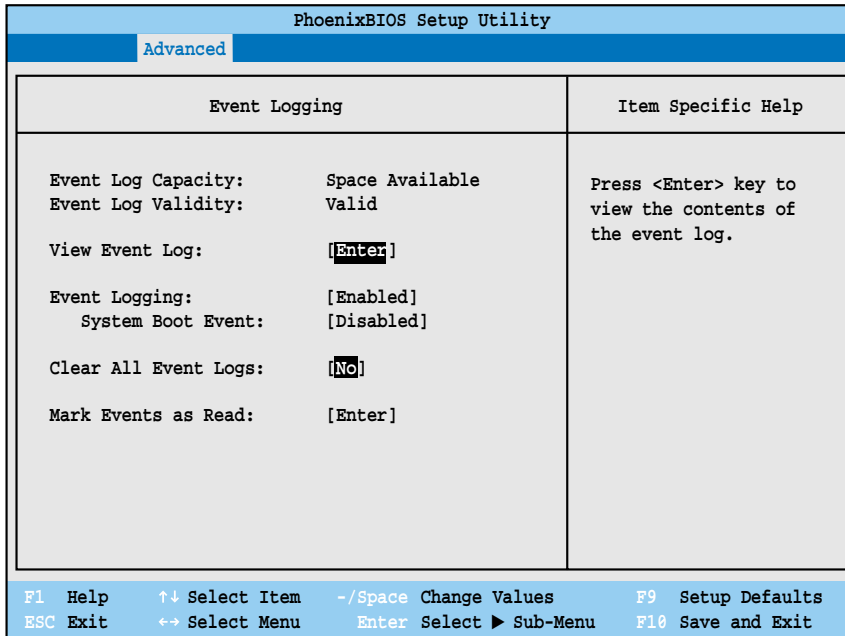DMI event logging.

```
                    PhoenixBIOS Setup Utility
          ┌─────────────┐
          │  Advanced   │
          └─────────────┘

  ┌────────────────────────────────────────┬─────────────────────────┐
  │              Event Logging              │    Item Specific Help   │
  │                                         │                         │
  │   Event Log Capacity:    Space Available│   Press <Enter> key to  │
  │   Event Log Validity:    Valid          │   view the contents of  │
  │                                         │   the event log.        │
  │   View Event Log:        [Enter]        │                         │
  │                                         │                         │
  │   Event Logging:         [Enabled]      │                         │
  │      System Boot Event:  [Disabled]     │                         │
  │                                         │                         │
  │   Clear All Event Logs:  [No]           │                         │
  │                                         │                         │
  │   Mark Events as Read:   [Enter]        │                         │
  │                                         │                         │
  │                                         │                         │
  └────────────────────────────────────────┴─────────────────────────┘
   F1  Help      ↑↓ Select Item   -/Space Change Values   F9   Setup Defaults
   ESC Exit      ←→ Select Menu      Enter Select ▶ Sub-Menu  F10  Save and Exit
```

Figure 11. Event Logging Submenu

Table 11: Fields, Options and Defaults for the Event Logging Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Event Log Capacity:		Space Available	Display only
Event Log Validity:		Valid	Display only
View Event Log:	• Enter	[Enter]	Allows you to view content of event log.
Event Logging:	• Disabled • Enabled	[Enabled]	Turns event logging on and off for all DMI events.
System Boot Event:	• Disabled • Enabled	[Disabled]	Turns event logging on and off for DMI system boot events.
Clear All Event Logs:	• No • Yes	[No]	When set to [Yes] all event logs will be cleared at next boot.
Mark Events as Read:	• Enter	[Enter]	Allows you to make all events currently in the event log as read.

SECURITY MENU – SETTING THE SECURITY FEATURES

The Security menu allows you to set up the data security features of your notebook to fit your operating needs and to view the current data security configuration. Follow the instructions for Navigating Through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Security menu and its submenus, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use. The default condition is no passwords required and no write protection.

> 🖊 **P O I N T**
>
> If you set a password, write it down and keep it in a safe place. If you forget the password you will have to contact your support representative to regain access to your secured functions and data.

> 🖊 **P O I N T S**
>
> - If you make an error when re-entering the password a [Warning] will be displayed on the screen. To try again, press the **Enter** key and then retype the password. Press the **Esc** key to abort the password setting process.
> - Entering a password incorrectly three times in a row will cause the keyboard and mouse to be locked out and the warning [System Disabled] to be displayed. If this happens, restart the computer by turning off and on the power with the power switch and use the correct password on reboot.
> - If the Password on Resume is Enabled and the Password on Boot is Disabled you will not have to type your password upon resuming the system from the Suspend or Save-to-Disk modes. Power Management Security will work only if Password on Boot is enabled.

```
                    PhoenixBIOS Setup Utility
       Main    Advanced    Security    Power    Boot    Info    Exit

                                                  Item Specific Help

       Supervisor Password Is:       Clear
       User Password Is:             Clear
                                                  Press <Enter> key to
       Set Supervisor Password       [Enter]      set Supervisor password
       Set User Password             [Enter]      to enable any password
       Minimum User Password Length  [0]          features.

       Password on Boot:             [Disabled]   Then password entry is
       Password on Resume:           [Disabled]   required to enter BIOS
                                                  Setup.
       Boot from Removable Media:    [All]
       Floppy Disk Access:           [All]
     ▶ Hard Disk Security
     ▶ Owner Information

       Hard Disk Boot Sector:        [Normal]



       F1  Help      ↑↓ Select Item   -/Space Change Values    F9  Setup Defaults
       ESC Exit      ←→ Select Menu     Enter Select▶Sub-Menu  F10 Save and Exit
```

Figure 12. Security Menu

Table 12: Fields, Options and Defaults for the Security Menu

Menu Field	Options	Default	Description
Supervisor Password is:	⸺	Clear	A display-only field. Set is displayed when the system supervisor password is set and Clear when it is not.
User Password is:	⸺	Clear	A display-only field. Set is displayed when the general user password is set, and Clear when it is not.
Set Supervisor Password	⸺	[Enter]	Sets, changes or cancels the Supervisor Password. The Supervisor Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the **Enter** key instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a Supervisor Password is set it must be used to access the BIOS setup utility.
Set User Password	⸺	[Enter]	Can only be accessed if Supervisor Password is set. Sets, changes or cancels the User Password. The User Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the **Enter** key instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a User Password is set it must be used to access the BIOS setup utility.
Minimum User Password Length:	⸺	[0]	⸺
Password on Boot:	• Disabled • First Boot • Every Boot	[Disabled]	When set to Disabled, no password is required. When set to First Boot, password entry required only before first boot. When Every Boot is selected, password required whenever the system is booted.
Password On Resume:	• Disabled • Enabled	[Disabled]	When Enabled, PS/2 keyboard and mouse inputs are locked out upon Resume From Suspend or Save-to-Disk until entering password.
Boot from Removable Media:	• All • Supervisor only	[All]	When Supervisor Only is selected, only the Supervisor can boot from removeable media. Only the user who enters the Supervisor Password before OS boot is treated as the Supervisor. When All is selected, boot from removeable media is not restricted.
Floppy Disk Access:	• All • Supervisor only	[All]	When Supervisor Only is selected, only the Supervisor can access the floppy disk. Only the user who enters the Supervisor Password before OS boot is treated as the Supervisor. When All is selected, floppy disk access is not restricted.
Hard Disk Security:	⸺	⸺	Configures hard disk security features.
Owner Information:	⸺	⸺	Sets Owner information.
Hard Disk Boot Sector:	• Normal • Write Protected	[Normal]	Sets protection mode for hard disk drive.

Exiting from the Security Menu

When you have finished setting the parameters on the Security Menu, you can either exit from setup utility or move to another menu. If you wish to exit from setup utility, press the [Esc] key to go to the Exit Menu. If you wish to move to another menu, use the cursor keys.

Hard Disk Security Submenu of the Security Menu

The Hard Disk Security submenu is for configuring hard
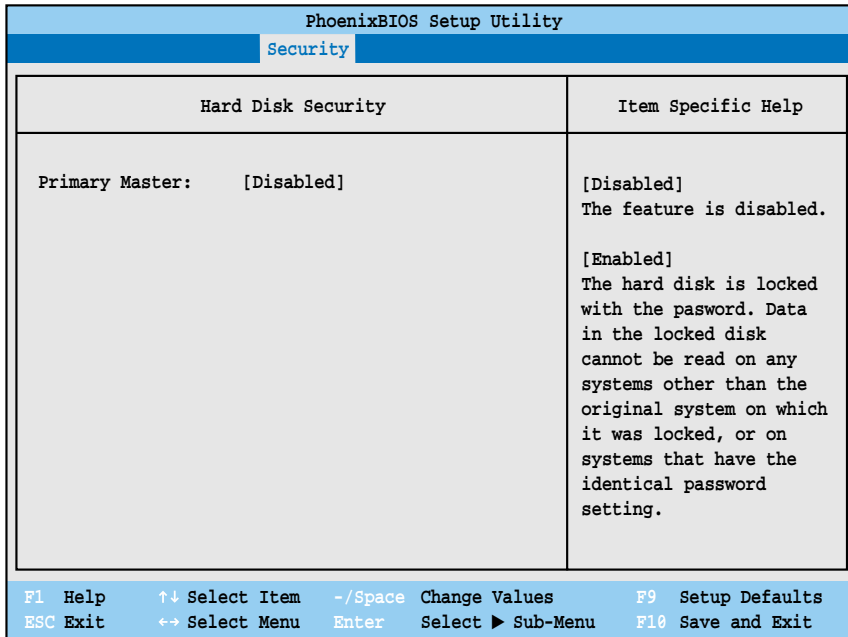disk security features.

```
                    PhoenixBIOS Setup Utility
             Security
 ┌──────────────────────────────────────┬──────────────────────────┐
 │          Hard Disk Security           │    Item Specific Help     │
 ├──────────────────────────────────────┼──────────────────────────┤
 │                                        │                          │
 │  Primary Master:     [Disabled]        │  [Disabled]              │
 │                                        │  The feature is disabled.│
 │                                        │                          │
 │                                        │  [Enabled]               │
 │                                        │  The hard disk is locked │
 │                                        │  with the pasword. Data  │
 │                                        │  in the locked disk      │
 │                                        │  cannot be read on any   │
 │                                        │  systems other than the  │
 │                                        │  original system on which│
 │                                        │  it was locked, or on    │
 │                                        │  systems that have the   │
 │                                        │  identical password      │
 │                                        │  setting.                │
 │                                        │                          │
 ├──────────────────────────────────────┴──────────────────────────┤
 │ F1  Help      ↑↓ Select Item   -/Space Change Values    F9  Setup Defaults │
 │ ESC Exit      ←→ Select Menu    Enter   Select ▶ Sub-Menu  F10 Save and Exit │
 └───────────────────────────────────────────────────────────────────┘
```

Figure 13. Hard Disk Security Submenu

Table 13: Fields, Options and Defaults for the Hard Disk Security Submenu of the Security Menu

Menu Field	Options	Default	Description
Primary Master:	• Disabled • Enabled	[Disabled]	Disabled: No password protection. Enabled: Hard drive is locked with the password. Data in the locked disk cannot be read on any systems other than the original system on which it was locked, or on systems that have the identical password setting.

Owner Information Submenu of the Security Menu

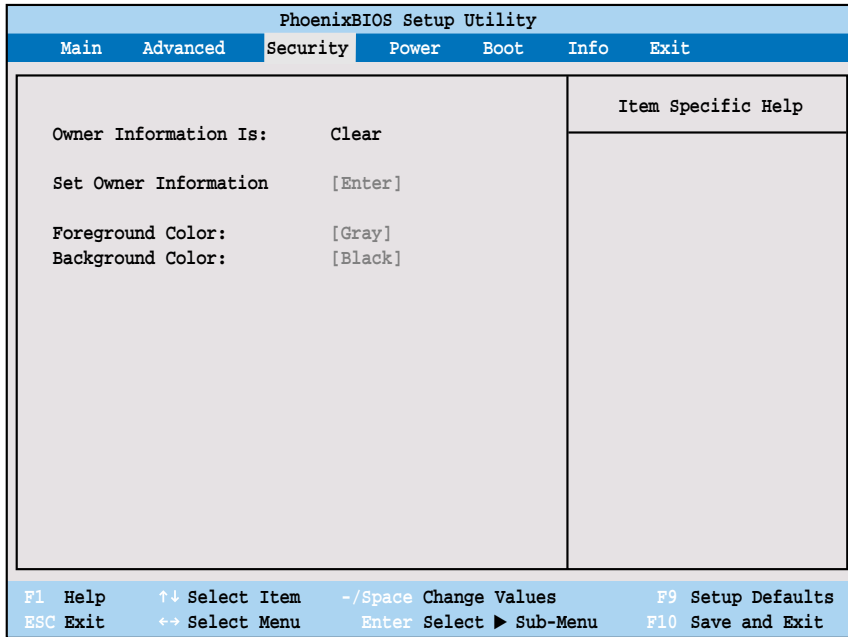The Owner Information submenu is for setting owner information.

```
                    PhoenixBIOS Setup Utility
     Main    Advanced   Security   Power    Boot    Info    Exit

                                              Item Specific Help
      Owner Information Is:      Clear

      Set Owner Information      [Enter]

      Foreground Color:         [Gray]
      Background Color:         [Black]




    F1  Help      ↑↓ Select Item    -/Space Change Values    F9  Setup Defaults
    ESC Exit      ←→ Select Menu     Enter Select ▶ Sub-Menu   F10 Save and Exit
```

Figure 14.   Owner Information Submenu

Table 14: Fields, Options and Defaults for the Owner Information Submenu of the Security Menu

Menu Field	Options			Default	Description
Owner Information Is:	⸺			Clear	Display only.
Set Owner Information:	⸺			[Enter]	Field to write owner information, i.e. name.
Foreground Color:	• Black • Blue • Green • Cyan • Red • Magenta	• Brown • White • Gray • Light Blue • Light Green	• Light Cyan • Light Red • Light Magenta • Light Yellow • Bright White	[Gray]	
Background Color:	• Black • Blue • Green • Cyan • Red • Magenta	• Brown • White • Gray • Light Blue • Light Green	• Light Cyan • Light Red • Light Magenta • Light Yellow • Bright White	[Black]	

POWER MENU – SETTING POWER MANAGEMENT FEATURES

The Power menu allows you to set and change the power management parameters. Follow the instructions for Navigating Through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Power menu and its submenus, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.
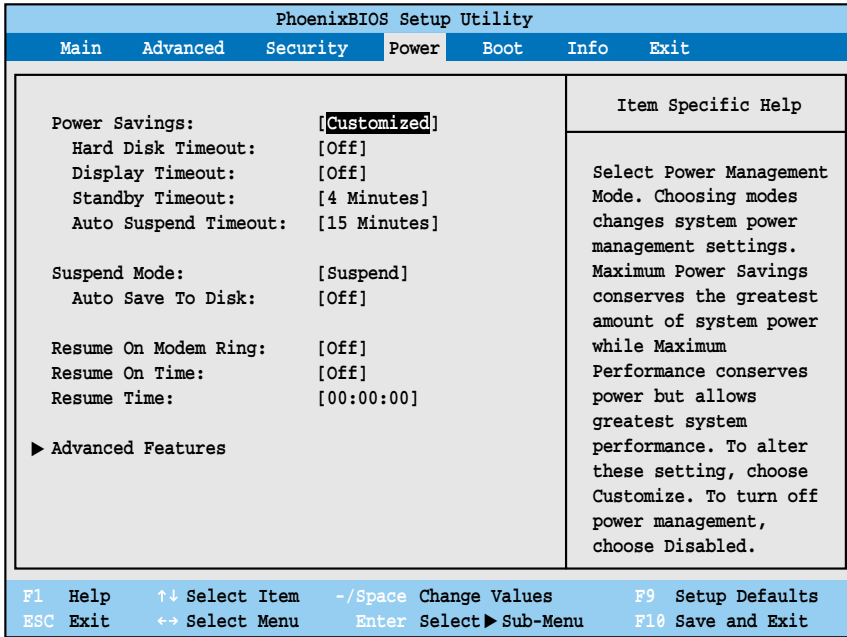
```
                    PhoenixBIOS Setup Utility
      Main    Advanced    Security    Power    Boot    Info    Exit

                                                  Item Specific Help

       Power Savings:          [Customized]
         Hard Disk Timeout:    [Off]
         Display Timeout:      [Off]           Select Power Management
         Standby Timeout:      [4 Minutes]     Mode. Choosing modes
         Auto Suspend Timeout: [15 Minutes]    changes system power
                                               management settings.
                                               Maximum Power Savings
       Suspend Mode:           [Suspend]       conserves the greatest
         Auto Save To Disk:    [Off]           amount of system power
                                               while Maximum
       Resume On Modem Ring:   [Off]           Performance conserves
       Resume On Time:         [Off]           power but allows
       Resume Time:            [00:00:00]      greatest system
                                               performance. To alter
     ▶ Advanced Features                       these setting, choose
                                               Customize. To turn off
                                               power management,
                                               choose Disabled.

     F1  Help      ↑↓ Select Item    -/Space Change Values    F9  Setup Defaults
     ESC Exit      ←→ Select Menu      Enter Select▶ Sub-Menu  F10 Save and Exit
```

Figure 15. Power Menu

Table 15: Fields, Options and Defaults for the Power Menu

Menu field	Options	Default	Description
Power Savings:	• Disabled • Customized • Maximum Power Savings • Maximum Performance	[Customized]	Sets the power savings parameters to a factory installed combination of parameters, a custom set of parameters set by you or no power saving features.
Hard Disk Timeout:	• Off • 30 seconds to 20 Minutes	[Off]	Sets the length of time that the hard drive can be inactive before your note-book automatically turns off the power to the hard drive controller and drive motor. If you choose a factory installed combination of parameters this field will display the setting. If you choose to customize the parameters you will be able to set this yourself. The options available vary from Off, which has no inactivity shutoff, to 20 minutes.
Display Timeout:	• Off • 2 to 20 Minutes	[Off]	Sets the length of time without any user input device activity before the display is turned off. If you choose a factory combination of parameters, this field will display the setting. If you choose to customize the parameters, you will be able to set this yourself. Off has no inactivity shutoff.

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Table 15: Fields, Options and Defaults for the Power Menu

Menu field	Options	Default	Description
Standby Timeout:	• Off • 1 to 16 Minutes	[4 Minutes]	Sets the length of time without any user input device activity before the CPU is set to half speed and the display and the hard drive are turned off. If you choose a factory combination of parameters this field will display the setting. If you choose to customize the parameters you will be able to set it yourself.
Auto Suspend Timeout:	• Off • 5 to 60 minutes	[15 Minutes]	Sets the length of time without any I/O activity before your note-book goes into Suspend mode. If you choose a factory combination of parameters this field will display that setting. If you choose to customize the parameters you will be able to set this yourself. Off has no inactivity suspension.
Suspend Mode:	• Suspend • Save to Disk	[Suspend]	Sets the form of suspension state. If you choose Suspend, you will suspend operation with power to system memory, and everything else powered down or in a very low power state. If you choose Save-to-Disk your note-book will save all of system memory and the operating parameters to the hard drive before turning your notebook to the pseudo-off condition.
Auto Save to Disk:	• Off • After 1 Hour	[Off]	When set to "After 1 Hour", your notebook will automatically save all system memory and the operating parameters to the hard drive and go to pseudo-off if the notebook is left in Suspend mode for more than an hour.
Resume On Modem Ring:	• Off • On	[Off]	Sets whether or not to Resume from a suspension state when a message is received by telephone line. This feature will not operate if the Save-to-Disk mode is enabled. This feature applies to internal and external modems.
Resume On Time:	• Off • On	[Off]	Sets whether or not to resume from a suspension state at a designated time. This feature is available from either the Suspend or Save-to-Disk modes.
Resume Time:	——	[00:00:00]	Sets the designated time, on a 24-hour clock, when the notebook is to auto-matically resume operation from the Suspend state. The format of the clock setting is hours:minutes:seconds. Each segment of the time is set separately, either by incrementing or by typing in the numbers. You move between the segments with the [**Tab**] key or the [**Shift**]+[**Tab**] keys. This only applies when Resume on Time is set to On.
Advanced Features:	——	——	When selected, opens the Advanced Features submenu which allows setting additional power saving parameters.

Factory Installed Values for Power Saving Profiles

	Hard Disk Timeout	Video Timeout	Standby Timeout	Auto Suspend Timeout
Customized:	Off	Off	4 Minutes	15 Minutes
Maximum Power Savings:	30 Seconds	2 Minutes	1 Minute	5 Minutes
Maximum Performance:	Off	Off	Off	15 Minutes
Disabled:	Off	Off	Off	Off
Sample Customized Profile: (To get even better battery life keep the display and volume settings as low as pos-sible and use the sample customized profile.)	2 Minutes	1 Minute	1 Minute	5 Minutes

Advanced Features Submenu of the Power Menu

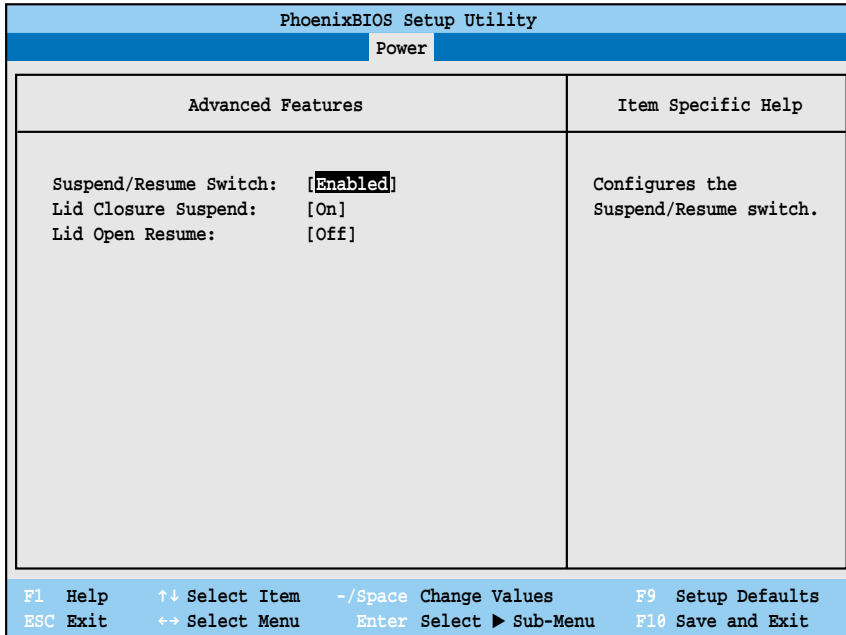The Advanced Features submenu is for setting some non-time related power saving parameters.

```
                    PhoenixBIOS Setup Utility
                              Power

        Advanced Features                    Item Specific Help

    Suspend/Resume Switch:   [Enabled]       Configures the
    Lid Closure Suspend:     [On]            Suspend/Resume switch.
    Lid Open Resume:         [Off]



F1  Help      ↑↓ Select Item    -/Space Change Values    F9  Setup Defaults
ESC Exit      ←→ Select Menu     Enter  Select ▶ Sub-Menu F10 Save and Exit
```

Figure 16. Advanced Features Submenu

Table 16: Fields, Options and Defaults for the Advanced Features Submenu of the Power Menu

Menu Field	Options	Default	Description
Suspend/Resume Switch:	• Disabled • Enabled	[Enabled]	Sets the function of the Suspend/Resume button when your notebook is in an active state. The resume function can not be disabled as it works regardless of any other settings.+
Lid Closure Suspend:	• Off • On	[On]	Enables and disables having closure of the Display panel put your notebook in Suspend mode.
Lid Open Resume:	• Off • On	[On]	Enables and disables having opening the Display panel acting as an automatic resume.

Exiting from Power Menu

When you have finished setting the boot parameters with the Power menu, you can either exit from the setup utility or move to another menu. If you wish to exit from

the setup utility press the [**Esc**] key to go to the Exit menu. If you wish to move to another menu, use the cursor keys.

BOOT MENU – SELECTING THE OPERATING SYSTEM SOURCE

The Boot Menu is used to select the order in which the BIOS searches sources for the operating system. Follow the instructions for Navigating Through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Boot menu and its submenu, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.
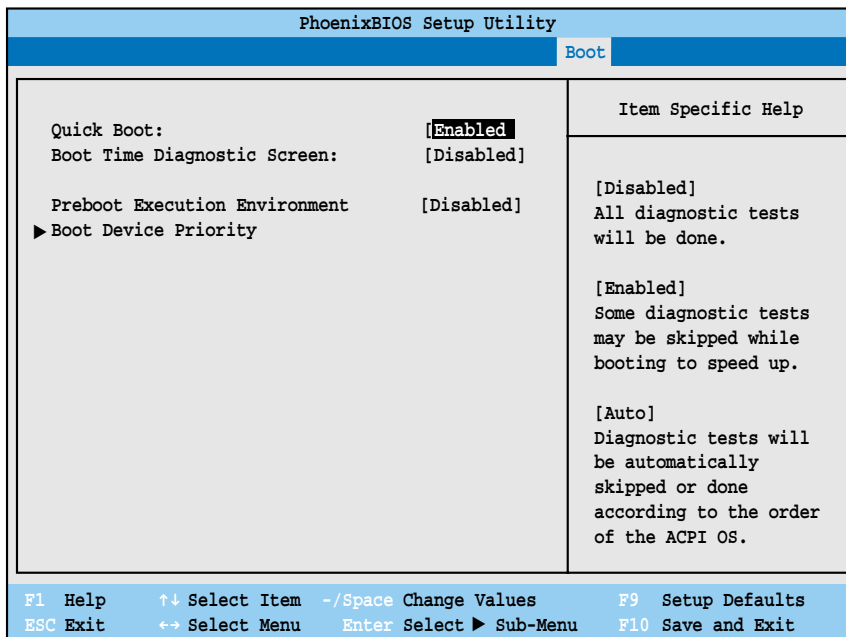
```
                    PhoenixBIOS Setup Utility
                                             Boot

                                             ┌─────────────────────┐
                                             │  Item Specific Help │
    Quick Boot:                 [Enabled]    │                     │
    Boot Time Diagnostic Screen: [Disabled]  │                     │
                                             │  [Disabled]         │
    Preboot Execution Environment [Disabled] │  All diagnostic tests│
  ▶ Boot Device Priority                     │  will be done.      │
                                             │                     │
                                             │  [Enabled]          │
                                             │  Some diagnostic tests│
                                             │  may be skipped while│
                                             │  booting to speed up.│
                                             │                     │
                                             │  [Auto]             │
                                             │  Diagnostic tests will│
                                             │  be automatically   │
                                             │  skipped or done    │
                                             │  according to the order│
                                             │  of the ACPI OS.    │
                                             └─────────────────────┘

 F1  Help      ↑↓ Select Item   -/Space Change Values   F9  Setup Defaults
 ESC Exit      ←→ Select Menu    Enter Select ▶ Sub-Menu  F10 Save and Exit
```

Figure 17. Boot Menu

Table 17: Fields, Options and Defaults for the Boot Menu

Menu Field	Options	Default	Description
QuickBoot Mode:	• Disabled • Enabled • Auto	[Enabled]	Turns on and off booting with a truncated set of Power On Self Test. (Fewer tests mean faster turn on.)
Boot-time Diagnostic Screen:	• Disabled • Enabled	[Disabled]	Turns on and off display of test results instead of Fujitsu logo screen during Power On Self Test.
Preboot Execution Environment	• Disabled • Enabled	[Disabled]	Turns off and on the preboot execution environment feature.
Boot Device Priority	• Selects the Boot Device Priority submenu	—	This menu allows setting up the source for the operating system.

Boot Device Priority Submenu of the Boot Menu

The Boot Device Priority submenu is for setting the order of checking of sources for the operating system.
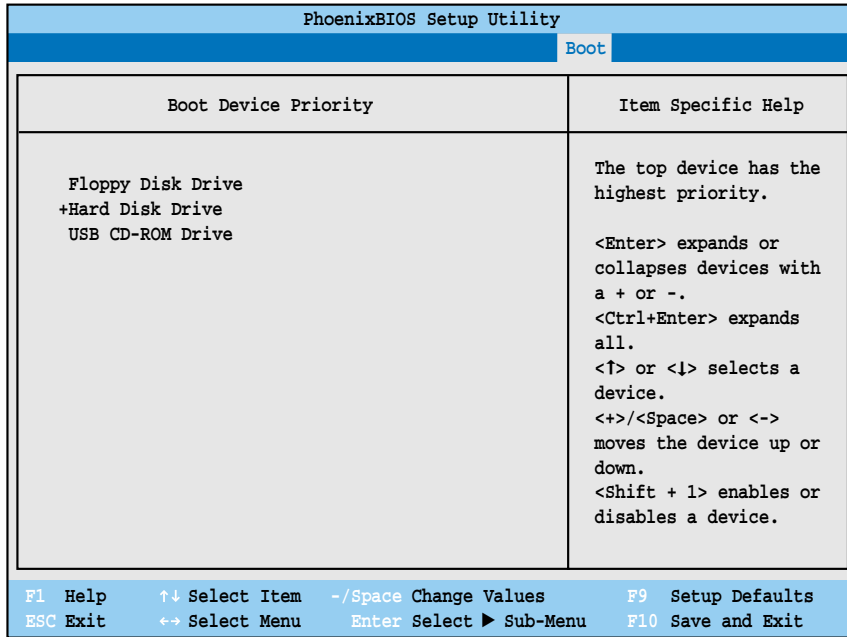
```
               PhoenixBIOS Setup Utility
                                          Boot

         Boot Device Priority            |    Item Specific Help

                                         |  The top device has the
      Floppy Disk Drive                  |  highest priority.
     +Hard Disk Drive                    |
      USB CD-ROM Drive                   |  <Enter> expands or
                                         |  collapses devices with
                                         |  a + or -.
                                         |  <Ctrl+Enter> expands
                                         |  all.
                                         |  <↑> or <↓> selects a
                                         |  device.
                                         |  <+>/<Space> or <->
                                         |  moves the device up or
                                         |  down.
                                         |  <Shift + 1> enables or
                                         |  disables a device.

  F1  Help      ↑↓ Select Item   -/Space Change Values    F9   Setup Defaults
  ESC Exit      ←→ Select Menu     Enter Select ▶ Sub-Menu F10  Save and Exit
```

Figure 18. Boot Device Priority Submenu

Table 18: Fields, Options and Defaults for the Boot Device Priority Submenu of the Boot Menu

Menu Field	Options	Description
Floppy Disk Drive	——	The boot selections determine the order in which the BIOS searches for the operating system during a startup sequence. To change the order highlight one source by using the [**up**] or [**down**] cursor keys and then press the [+] or [-] key to change the order number for that source. Be sure to save your changed order when you exit the BIOS setup utility.
Hard Disk Drive	• TOSHIBA MHK2018GAP-(PM) • Bootable Add-in Cards	——
USB CD-ROM Drive	There is no USB CD-ROM device currently available for this system; this option is reserved for future use.	

Exiting from Boot Menu

When you have finished setting the boot parameters with the Boot menu, you can either exit from the setup utility or move to another menu. If you wish to exit from the setup utility press the [**Esc**] key to go to the Exit menu. If you wish to move to another menu, use the cursor keys.

INFO MENU - DISPLAYS BASIC SYSTEM INFORMATION

The Info menu is a display-only screen that provides the configuration information for your notebook.

The following table shows the names of the menu fields for the Info menu and the information displayed in those fields. These fields are for information purposes only, and are not editable (except for the Asset Number as in the Point below).

POINTS

- The asset number is an optional user-entered field and can be entered through the use of third party DMI Compliant software, such as LANdesk Client Manager.
- The information displayed on this screen is variable according to the unit you purchased.
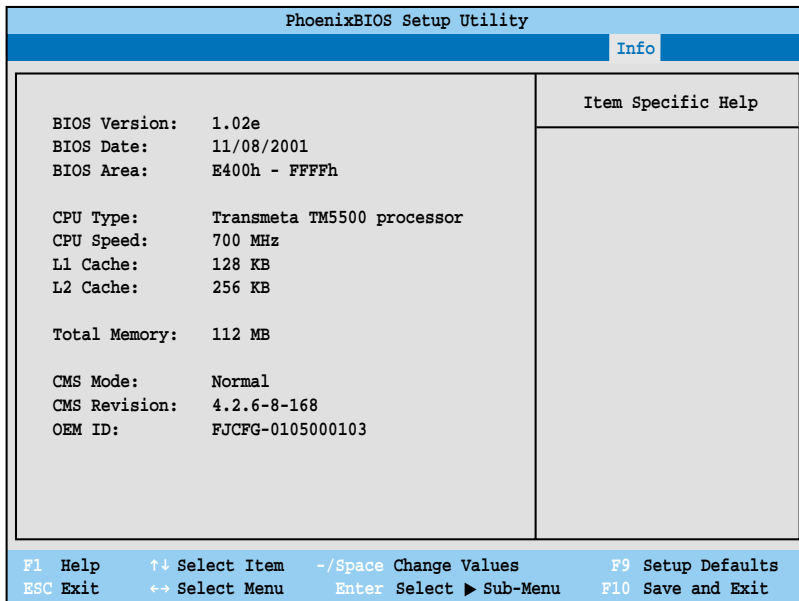
```
                     PhoenixBIOS Setup Utility
                                                     Info

                                              Item Specific Help
    BIOS Version:    1.02e
    BIOS Date:       11/08/2001
    BIOS Area:       E400h - FFFFh

    CPU Type:        Transmeta TM5500 processor
    CPU Speed:       700 MHz
    L1 Cache:        128 KB
    L2 Cache:        256 KB

    Total Memory:    112 MB

    CMS Mode:        Normal
    CMS Revision:    4.2.6-8-168
    OEM ID:          FJCFG-0105000103




 F1  Help       ↑↓ Select Item    -/Space Change Values    F9  Setup Defaults
 ESC Exit       ←→ Select Menu     Enter Select ▶ Sub-Menu  F10 Save and Exit
```

Figure 19. Info Menu

Table 19: Fields, Options and Defaults for the Info Menu

Menu Field	Default	Menu Field	Default
BIOS Version:	1.02e	L2 Cache:	256 KB
BIOS Date:	11/08/2001	Total Memory:	112 MB
BIOS Area:	E400h – FFFFh	CMS* Mode:	Normal
CPU Type:	Transmeta TM5500 processor	CMS* Revision:	4.2.6-8-168
CPU Speed:	700 MHz	OEM ID:	FJCFG-0105000103
L1 Cache:	128 KB	*CMS = Code Morphing Software (Crusoe processor software architecture that results in longer battery life.)	

EXIT MENU – LEAVING THE SETUP UTILITY

The Exit Menu is used to leave the setup utility. Follow
the instructions for Navigating Through The Setup
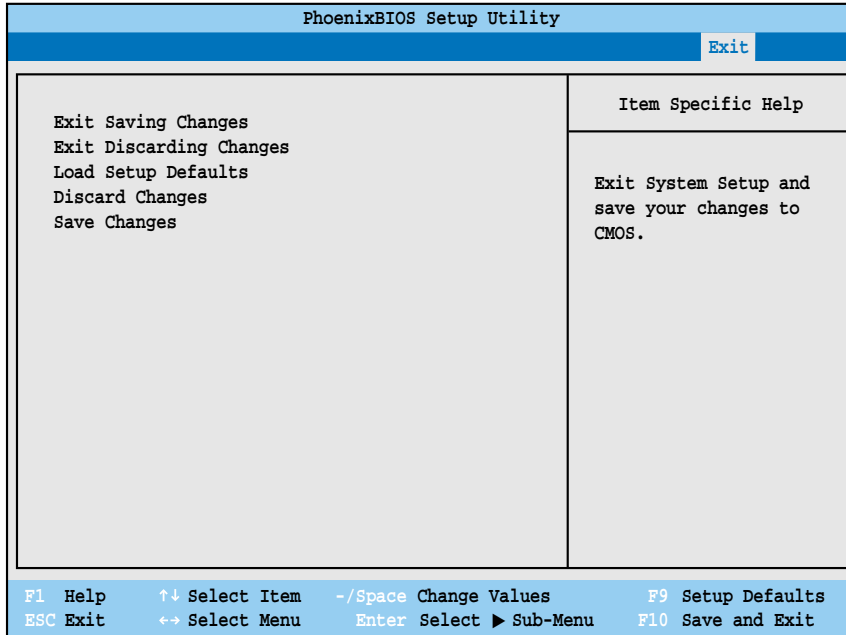Utility to make any changes.

```
                        PhoenixBIOS Setup Utility
                                                          Exit

                                                    Item Specific Help
         Exit Saving Changes
         Exit Discarding Changes
         Load Setup Defaults
         Discard Changes                        Exit System Setup and
         Save Changes                           save your changes to
                                                CMOS.













     F1  Help          ↑↓ Select Item   -/Space Change Values     F9  Setup Defaults
     ESC Exit          ←→ Select Menu     Enter  Select ▶ Sub-Menu  F10 Save and Exit
```

Figure 20. Exit Menu

The following table shows the names of the menu fields
for the Exit menu, the default settings and a description
of the field's function and any special information
needed to help understand the field's use.

Table 20: Fields, Options and Defaults for the Exit Menu

Menu Field	Optional Keyboard Shortcut	Default	Description
Exit Saving Changes	Press the F10 key	——	Exit Saving Changes and Exit will store all the entries on every menu of the setup utility to the BIOS memory and then exit the setup utility. A confirmation message Save Configuration changes and exit now? [Yes] [No] will be displayed.
Exit Discarding Changes	——	——	Selecting Exit Discarding Changes and Exit will exit the setup utility with out writing to the BIOS memory. When the BIOS recognizes this selection it will load the operating system and begin operation.

Table 20: Fields, Options and Defaults for the Exit Menu

Menu Field	Optional Keyboard Shortcut	Default	Description
Load Setup Defaults	Press the F9 key	——	Selecting Load Setup Defaults will load the factory preset default values for all menu fields, then display the message `Load default configuration now? [Yes] [No]`. When confirmed the setup utility will return to the Exit Menu. To return to another menu follow the directions in the Navigating Through The Setup Utility section.
Discard Changes	——	——	Selecting Discard Changes will load the previous values in BIOS memory for all menu fields. The message `Load previous now? [Yes] [No]` will be displayed. When confirmed the setup utility will return to the Exit menu. To return to another menu, follow the directions in the Navigating Through The Setup Utility section.
Save Changes	——	——	Selecting Save Changes will cause the new settings in all menus to be written to the BIOS memory. The message `Save configuration changes now? [Yes] [No]` will be displayed. When confirmed, the setup utility will return to the Exit menu. To return to another menu, follow the directions in the Navigating Through The Setup Utility section.